



US Department
of Transportation

**Research and
Special Programs
Administration**

400 Seventh Street, S W
Washington D C 20590

APR 11 2002

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Reed D. Robinson
Vice-President, Field Services
Columbia Gas Transmission Company
P. O. Box 1273
1700 MacCorkle Avenue, SE
Charleston, WV 25325-1273

RE: CPF No 1-2001-1002

Dear Mr. Robinson:

Enclosed is a corrected copy of the Final Order issued by the Associate Administrator for Pipeline Safety in the above-referenced case on March 29, 2002. This corrected copy of the Final Order is to replace your file copy received and served by fax on March 29, 2002. The attached copy contains a minor correction on page 2 and page 12 which is indicated in *italics*. It makes findings of violations, assesses a civil penalty of \$400,000.00 and requires certain corrective action.

Sincerely,

Gwendolyn M. Hill
Pipeline Compliance Registry
Office of Pipeline Safety

Enclosure

In the Matter of)
Columbia Gas Transmission Company,) CPF No. 1-2001-1002
Respondent)
)

In its written response and at the hearing Respondent did not contest the allegations of violation but presented information relative to corrective actions taken since the inspection. Evidence that relates to activities that occurred after the inspection is not relevant to determining whether a violation occurred. However, Respondent was permitted to submit additional information and was allowed to discuss its efforts to achieve compliance. After the hearing, Respondent submitted further response dated June 13, 2001

Uncontested Violations

Respondent did not contest the items in the Notice. Accordingly, I find that Respondent violated 49 C.F.R. Part 192, as more fully described in the Notice:

49 C.F.R. §192.745 – failure to inspect and partially operate each transmission line valve that might be required during any emergency at intervals not exceeding 15 months, but at least once each calendar year;

49 C.F.R. §192.477 – failure to use a suitable means to monitor internal corrosion two times each calendar year, but with intervals not exceeding 7 1/2 months;

49 C.F.R. §192.453 – failure to have the corrosion control procedures required by §192.605(b)(2) carried out by or under the direction of a person qualified in pipeline corrosion control methods;

49 C.F.R. §192.465 – failure to test each pipeline under cathodic protection at least once each calendar year, but with intervals not exceeding 15 months, to determine whether the cathodic protection meets the requirements of §192.463.

49 C.F.R. §192.457 – failure to cathodically protect pipeline in which active corrosion is found,

49 C.F.R. §192.479 - failure to protect aboveground sections of the pipeline from atmospheric corrosion;

49 C.F.R. §192.731 – failure to maintain records that each remote control shutdown device has been inspected and tested at intervals not exceeding 15 months, but at least once each calendar year, to determine that it functions properly;

49 C.F.R. §192.605 - failure to review and update the procedural manual for conducting operations and maintenance activities and for emergency response;

49 C.F.R. §192.751 - failure to take steps to minimize the danger of accidental ignition of gas in any structure or area where the presence of gas constitutes a hazard of fire or explosion;

49 C.F.R. §192.13 – failure to maintain, modify as appropriate, and follow the plans, procedures, and programs used to satisfy the requirements of part 192;

49 C.F.R. §192.317 - failure to maintain, modify and follow procedures to protect each aboveground transmission line or main, not located offshore or in navigable water areas, from accidental damage by vehicular traffic or other similar causes, either by being placed at a safe distance from the traffic or by installing barricades;

49 C.F.R. §192.555 - failure to follow the uprating requirements for pipelines constructed before September 12, 1970;

49 C.F.R. §192.619 - failure to establish a maximum allowable operating pressure for the distribution system;

49 C.F.R. §192.739 - failure to inspect and test each pressure limiting station, relief device, and pressure regulating station and its equipment at intervals not exceeding 15 months, but at least once each calendar year;

49 C.F.R. §192.705 - failure to have a patrol program to observe conditions on and adjacent to the transmission right-of-way for indications of leaks, construction activity, and other factors affecting safety and operation;

49 C.F.R. §192.707 - failure to maintain pipeline markers with the correct name of the operator and telephone number where the operator can be reached at all times; and

49 C.F.R. §192.707 - failure to place and maintain pipeline markers along each section of a main and transmission line that is located aboveground in an area accessible to the public.

These findings of violation will be considered prior offenses in any subsequent enforcement action taken against Respondent.

ASSESSMENT OF PENALTY

Under 49 U.S.C. § 60122, Respondent is subject to a civil penalty not to exceed \$25,000 per violation for each day of the violation up to a maximum of \$500,000 for any related series of violations. The Notice proposed a total penalty assessment of \$554,000.

49 U.S.C. § 60122 and 49 C.F.R. § 190.225 require that, in determining the amount of the civil penalty, I consider the following criteria: nature, circumstances, and gravity of the violation, degree of Respondent's culpability, history of Respondent's prior offenses, Respondent's ability to pay the penalty, good faith by Respondent in attempting to achieve compliance, the effect on Respondent's ability to continue in business, and such other matters as justice may require.

At the hearing and in its responses, Respondent requested that a portion or all of the proposed penalties be directed to fund supplemental research projects related to internal corrosion. 49 C.F.R. §190.221 states in pertinent part, "proceedings under §§190.207 through 190.213 may be conducted to determine the nature and extent of the violations and to assess and, if appropriate, compromise a civil penalty." Compromise does not authorize an alternative payment policy in lieu of paying a penalty or a portion of a penalty. The authority to "compromise" civil penalties empowers OPS to adjust penalties to reflect the special circumstances of the violation or the cost of collection. OPS's authority does not extend to remedies unrelated to the correction of the specific violation in question.

The pipeline safety law does not provide for the use of research projects as an enforcement tool. There may be instances in which a research project is appropriate as an aid to achieving compliance and requiring such a project in a compliance order is allowed. However, there is no enforcement mechanism for diverting the payment of civil penalties into a research project or for requiring the conduct of research that has no relationship to future compliance with the regulation violated.

The threat of sanction must be real, and enforcement actions must be direct. The allowance of research projects would eliminate the impact of penalties. Some operators do not comply because they do not think they will be caught or could quickly bring themselves into compliance when caught. Insuring that violators do not reap an economic benefit by failing to comply with 49 C.F.R. Part 192 is critical, if the penalties are to deter violations successfully. An economic benefit is based on the theory that an operator delays and/or avoids spending money to come into compliance and has the benefit of that money until it is spent to come into compliance. Operators can benefit economically by not expending funds to install needed equipment, not effecting changes to reduce leaks, not performing required tests, not employing a sufficient number of adequately trained staff, and not establishing or following precautionary methods required by regulations. An operator may decide that it is in its best economic interest to delay the commitment of funds for compliance. Penalties are intended to discourage this short sighted approach to safety and to encourage compliance with the law

Research projects, in lieu of penalties, further compromise deterrence objectives and do little to encourage compliance. Research projects directly benefit the company by improving the reliability of its service to its customers or by the development of marketable technology. Research also provides indirect benefits by improving the company's public affairs profile. Allowing a company to conduct research and reap these benefits in addition to the economic benefit already achieved through noncompliance does nothing to encourage the company to comply in the future.

Previous on-site safety inspection CPF No 1-2000-1002

Between the dates of August 16 and November 5, 1999, the Office of Pipeline Safety (OPS) conducted an on-site safety inspection of Respondent's facilities and records in portions of the OPS Eastern Region and Ohio. At the conclusion of the inspection, Respondent was informed of probable violations in an exit interview. OPS issued to Respondent a Notice of Probable Violation, Proposed Civil Penalty and Warning (Notice), alleging various violations of 49 C.F.R. Part 192. Respondent requested and was granted a hearing.

The Associate Administrator for OPS issued a Final Order (CPF No. 1-2000-1002) finding Respondent committed violations of 49 C.F.R. Part 192, assessed a civil penalty in the amount of \$198,000, warned of other unsafe conditions that should be addressed by the Respondent and ordered compliance therewith. The Final Order also notified Respondent that the findings of violation would be considered prior offenses in any subsequent enforcement action taken against Respondent.

Present on-site safety inspection CPF No 1-2001-1002

When OPS returned, between June 5 and September 11, 2000, to conduct an on-site safety inspection of Respondent's facilities and records in portions of the OPS Eastern Region and Ohio, OPS inspectors found some repeated instances of noncompliance. Specifically, the inspection conducted between June 5 and September 11, 2000 found Respondent still in violation of 49 C.F.R. §§192.751, 192.707, 192.477, 192.731, and 192.317 (warning item). These violations are all prior offenses for which the Respondent had received notice. To allow the Respondent to negotiate an alternative payment policy for these subsequent violations, in the form of a research project, in lieu of paying a penalty or a portion of a penalty is unfair to operators who do comply with the law. If operators perceive that violations of pipeline safety regulations are treated lightly, OPS's enforcement and regulatory efforts are subverted.

Itemized Penalty Assessment

Valve Inspections

The proposed penalty for **Item 1** of the Notice is \$500,000 for violation of 49 C.F.R. §192.745, as the documentation and information available at the time of the inspection was inadequate to verify that each valve, identified by the Respondent as transmission line valves that might be required during any emergency, was inspected and partially operated at intervals not exceeding fifteen months. The documentation and information available, at the time of the inspection, for the Ripley, WV location lacked the 1999 records for sixty (60) valves. Although the 1998 and 2000 records were provided, the inspection interval was exceeded by six (6) months and twelve (12) days. The 1998 inspections were conducted on August 24, 1998 and the 2000 inspections were conducted on June 21, 2000.

Similarly, the documentation and information available, at the time of the inspection, for the Rockport, WV location lacked the 1998 records for thirty-eight (38) valves. The 1997 inspections were conducted between March 21, 1997 and March 25, 1997. The 1999 inspections were conducted between April 7, 1999 and April 12, 1999. The inspections exceeded the 15-month inspection interval required by §192.745 by nine (9) months and thirteen (13) days.

The Clendenin, WV location showed no records for 1996, 1997, 1998, and 1999 for 41 valves; no records for 1997, 1998, and 1999 for 6 valves; and no records for 1996 and 1997 for 4 valves, as well as the following repeated instances of exceeding the 15-month inspection interval required by §192.745:

CLENDENIN VALVE VIOLATION SUMMARY			
Line	# of Valves in Violation	Valves exceeding 15 Month Maximum Interval	# of Valves with No Records
1 N	3	1 valve exceeded interval by 2 years	2 valves - No records for years 96, 97, 98, 99
2 NM-62	3	2 valves exceeded interval by 10 months	1 valve -No records for years 96, 97, 98, 99
3 SM-101	2	1 valve exceeded interval by 7 months	1 valve -No records for years 96, 97, 98, 99
4 SM-106	1	-----	No records for years 96, 97
5 SM-107	1	exceeded interval 1 year	-----
6 SM-122	3	1 valve exceeded interval by 8 months	2 valves No records for years 96, 97
7 SM-80	2	1 valve exceeded interval by 7 months	No records for years 96, 97
8 SM-86	4	2 valves exceeded interval by 2 years	1 valve-No records for years 96, 97, 98, 99
9 SM-86 Loop	3	-----	No records for years 96, 97, 98, 99
10 SM-88	13	3 valves exceeded interval by 29 days	10 valves-No records for years 96, 97, 98,99
11 TM-10	10	8 valves exceeded interval by 8 months	2 valves-No records for years 96, 97, 98, 99
12 TM-11	4	3 valves exceeded interval by 8 months	1 valve-No records for years 96, 97, 98, 99
13 TM-12	3	3 valves exceeded interval by 8 months	-----
14 TM-17	7	3 valves exceeded interval by 9 months	4 valves -No records for years 96, 97, 98, 99
15 TM-6	1	valve exceeded interval by 8 months	-----
16 TM-7	13	10 valves exceeded interval by 8 months	3 valves- No records for years 96, 97, 98, 99
17 TM-7 EXT	2	2 valves exceeded interval by 8 months	-----
17 TM-7 Loop	21	16 valves exceeded interval by 8 months	5 valves -No records for years 96, 97, 98, 99
17 WB	6	1 valve exceeded interval by 8 months	5 valves-No records for years 96, 97, 98, 99
18 WB-5 XO	2	-----	No records for years 96, 97, 98, 99
19 WB-Loop	3	-----	No records for years 97, 98, 99
20 X-52-A-M1	6	6 valves exceeded interval by 9 months	-----
21 X-52-M1	4	1 valve exceeded interval by 8 months	3 valves -No records for years 96, 97, 98, 99
21 X-52-M2	4	3 valves exceeded interval by 10 months	1 valve -No records for years 96, 97, 98, 99

The Respondent was previously found in violation of 49 C F.R. §192.745 for failure to repair the grease fitting on Valve A-484 at the Carbondale, WV location. This is the third inspection to find Valve A-484 in an unsafe condition. The valve was found to be in need of repair during the annual valve inspections on June 4, 1999 and over a year later on June 12, 2000 Valve A-484 was still in need of repair

This regulation provides safety precautions that minimize the risk of accident or injury to human life, the environment and property during an emergency. Valves that may be needed to control, divert and/or stop gas flow during emergencies are critical safety devices. Inoperative or malfunctioning valves may delay appropriate emergency response, thereby exposing the public and the environment to greater risks of injury and damage.

This violation stems primarily from a lack of administrative controls and inconsistency in management practices. Respondent provided information relative to corrective action it has taken with the implementation of new human resources and new technologies. Respondent's new management has committed to shift its focus to enhanced risk assessment to maintain compliance and to record and preserve data. Respondent has followed through on this commitment by meeting regularly with the Regional Director to seek opportunities for further improvements in addressing safety concerns. Accordingly, having reviewed the record, considered the assessment criteria and such other matters as justice may require, a reduction will be made in the amount of the proposed civil penalty. I assess Respondent a civil penalty of \$350,000 for these violations.

Internal Corrosion

The proposed penalty for **Item 2** is \$10,000 for violation of 49 C.F.R. §192.477, as no tests were conducted for the presence of corrosive components to minimize internal corrosion at the Files Creek, WV location. Undetected corrosion leads to weakened pipeline walls and increases the risk of failures. Preventive maintenance is critical to the safety of the public, environment and property. Respondent was previously found in violation of 49 C.F.R. §192.477 and assessed a penalty of \$165,000 for failing to check internal corrosion coupons at thirteen locations between 1996 and 1999 (CPF No. 1-2000-1002). In addition to the assessment criteria, consideration must be given to similar violations in the past, the number of prior violations, the frequency and duration of the violation, and whether the violation was perpetual or sporadic.

The magnitude of the risk of failure increases when there is a lack of monitoring both a pipeline's condition for early warning of failure and the efficiency of any mitigation program to reduce or arrest corrosion. Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a civil penalty of \$10,000 for this violation.

Corrosion Monitoring

The proposed penalty for **Item 3** is \$10,000 for violation of 49 C.F.R. §192.453, failure to have a qualified person implement the corrosion control program and procedures. Corrosion, both external and internal, is one of the conditions most threatening to the integrity of pipelines, which if left undetected can result in the rupture of the pipeline. It is critical to have a qualified person continuously monitor the corrosion program. Monitoring critical locations of a pipeline or a structure where the risk of corrosion is greatest allows personnel to take immediate action against the potential for a pipeline failure. Although, Gladys, West Virginia Line 7433-3 has a history of corrosion problems, and the last two coupon mpy readings indicated the potential for corrosive gas,

Respondent's unqualified personnel removed the coupon from service. While there are other coupons in the vicinity, the removal of this coupon precluded the relative corrosion rates for Line 7433-3 from being accurately measured, monitored and analyzed so that a determination could be made as to whether or not loss of metal is occurring and whether corrective measures would be required.

Respondent has taken considerable steps to revise its Internal Corrosion Control Plan to implement a process to evaluate its storage fields, improve its system of centralized record keeping and analysis to ascertain and monitor varying corrosion rates, improve its method for gathering and analyzing corrosion information, to specify what mpy loss rate would trigger investigative measures and has engaged a third party corrosion consultant. Nevertheless, these are activities that occurred after the inspection and are not relevant to determining whether a violation occurred. Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a civil penalty of \$10,000 for this violation.

The proposed penalty for **Item 4** is \$2,000 for violation of 49 C.F.R. §192.465(a). Respondent's records at the time of the inspection indicated that between 1998 and 1999 the cathodic protection system on Line 8233-3, in Cumberland, Maryland, and Line 1862 near Kane, Pennsylvania exceeded the 15 month maximum interval.

Inspection and testing at the required intervals are essential to knowing that the pipeline equipment is being maintained, will function properly and that its integrity is not compromised. Failure to perform the proper monitoring on each test station could result in inadequate protection of the pipe and could result in a leak in the future. Respondent has not shown any circumstance that would have prevented or justified it not monitoring each test location timely. Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a civil penalty of \$2,000 for this violation.

The proposed penalty for **Item 5** is \$2,000 for violation of 49 C.F.R. §192.457(b). Respondent's records at the time of the inspection indicated that there was no managed plan for the cathodic protection of Line X-76-D, a 6" bare steel transmission line, in Preston County, West Virginia. Although individual leak reports indicate that mag anodes were being applied, Respondent had not instituted a unified plan. The risk of corrosion on the pipeline significantly increases without proper cathodic protection systems. Preventive maintenance is critical to the safety of the public, environment and property. Respondent has not shown any circumstance that would have prevented or justified it not having a managed plan for cathodic protection. Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a civil penalty of \$2,000 for this violation.

Documentation Supporting Maintenance

The proposed penalty for **Item 7** is \$10,000 for violation of 49 C.F.R. §192.731(c) for failure to properly inspect and test emergency valves and devices at intervals not exceeding 15 months to

determine that it functions properly. The Salisbury, Pennsylvania station individual shutdown trigger valves were not listed on inspection forms prior to year 2000. Respondent's station inspection records for 2000 listed individual shutdown trigger valves in a summary format as being checked in, but each individual shutdown trigger valves was not shown as being tested. Although the Respondent's inspection records for the Waynesburg, Pennsylvania station show that the emergency shutdown trigger devices (ESD) were routinely tested, Respondent failed to produce detailed records to indicate that each ESD was exercised during those tests.

49 C.F.R. §192.709 requires that operators maintain records of specific required activities such as tests for a period of at least 5 years or until the next test is completed, whichever is longer. Failure to assure that all ESD are properly functioning creates the risk that one or all ESD may not operate correctly in the event of an emergency. 49 C.F.R. §192.731(c) provides safety precautions that minimize the risk of accident or injury to human life, the environment and property during an emergency. This violation is a prior offense for which Respondent was previously assessed a civil penalty in the amount of \$5,000 (CPF No. 1-2000-1002). Respondent has not shown any circumstance that would have prevented or justified its not consistently documenting and properly inspecting and testing emergency valves and devices. Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a civil penalty of \$10,000 for this violation.

The proposed penalty for **Item 8** is \$3,000 for violation of 49 C.F.R. §192.605(b)(3). Respondent's construction drawing #CD-4398-1101 indicates that significant changes have been made to piping at the Waynesburg, Pennsylvania station. Respondent failed to make available to operations and maintenance personnel a revised "as-built" drawing demonstrating the changes.

However, Respondent revised its drawing to reflect the changes shortly after the inspection. The Director, Eastern Region has accepted these revisions as adequate to assure safe operation of Respondent's pipeline system and has recommended dropping the penalty for this item. Accordingly, having reviewed the record and considered the assessment criteria, a civil penalty will not be assessed for this violation.

Failure to Follow Procedures

The proposed penalty for **Item 10a** is \$5,000 for violation of 49 C.F.R. §192.13(c) for failure to follow its procedures for isolation at the Majorsville, WV station, by failing to place a 'tag' on the energy isolating device, warning employees not to operate the valve until the tag is removed ('tag-out'). Employees need adequate information and instructions to accomplish their tasks without jeopardizing their safety or the operation of the pipeline. The tag-out procedures protect employees from possible injuries by alerting others not to energize, start up, or release stored energy during the servicing operation of the equipment. It is critical to follow tag-out procedures thoroughly as a safety precaution to minimize the risk of accident. Respondent has not shown any circumstance that would have prevented or justified it not properly following its tag-out procedures. Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a civil penalty of \$5,000 for this violation.

The proposed penalty for **Item 10b** is \$5,000 for violation of 49 C.F.R. §192.13(c), as Respondent failed to follow its procedure, #40.02.04, requiring the quarterly inspection and calibration of gas detection equipment within the compressor building at its Clendenin, WV station.

CLENDENIN QUARTERLY INSPECTION & GAS DETECTION VIOLATION SUMMARY

<u>QUARTER</u>	<u>DATE</u>	<u>STATUS</u>
4Q97	11-04-97	-----
1Q98	02-06-98	-----
2Q98	-----	No Records
3Q98	07-15-98	-----
4Q98	-----	No Records
1Q99	02-04-99	-----
2Q99	-----	No Records
3Q99	-----	No Records
4Q99	-----	No Records
1Q00	02-02-00	-----
2Q00	05-10-00	-----

Inspection and calibration of gas detection equipment is imperative to ensure that the equipment senses and responds to the presence of gas in air mixtures. The calibration and continuous measuring of conditions ensure conditions are kept within prescribed safety limits. The purpose of gas detection equipment is to warn of a hazardous condition so that action can be taken to prevent personal injury. The primary objective of the Federal gas pipeline safety standards is public safety and failure to properly conduct quarterly inspection and calibration of gas detection equipment to correct any deficiencies could adversely affect public safety. Considering the number of missed inspections and missing records, as identified above, the proposed penalty is moderate. Accordingly, having reviewed the record and considered the assessment criteria, Respondent is assessed a civil penalty of \$5,000 for this violation

Right-of-Way Issues

The proposed penalty for **Item 15** is \$5,000 for violation of 49 C.F.R. §192.705(a). The patrol program, in Tucker County, West Virginia, failed to detect that the stream bed had eroded and exposed Line 8000 to coating damage, superficial corrosion and scaling. Even after being alerted by the public, Respondent failed to take corrective action for three (3) years. A system of inspection should be maintained to insure reasonable promptness in the detection of all surface conditions on

and adjacent to the transmission line right-of-way for indications of any and all factors affecting the safety and operations of the pipeline. Respondent failed to exercise vigilance commensurate with the danger to protect the public, environment, and property from injury and destruction. Inspections made by the Respondent were perfunctory and inefficient. Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a civil penalty of \$5,000 for this violation.

The proposed penalty for **Item 16** is \$1,000 for violation of 49 C.F.R. §192.707(d)(2). The line marker posted at the delivery station in Brilliant, Ohio displays a disconnected telephone number. Requiring an operator to properly identify the location of its pipeline, the name of the operator and the telephone number where he can be reached is intended to prevent third persons from accidentally damaging the pipeline and thereby causing a hazardous substance to be released into the surrounding environment. The rule contemplates the protection of both people and property from an accidental discharge from the pipeline. A 1999 on-site safety inspection of Respondent's facilities found a similar condition, as more specifically discussed in CPF-1-2000-1002. Unmarked or inaccurate line markers increase the risk of harm to the public, environment, and property. Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a civil penalty of \$1,000 for this violation.

The proposed penalty for **Item 17** is \$1,000 for violation of 49 C.F.R. §192.707(c), as the operator failed to properly identify the location of its pipeline, the name of the operator and the telephone number where he can be reached at the Mt. Savage, Maryland station. Line markers must be in place and maintained to indicate the exact location of the pipelines to prevent contact with them or in case of an emergency. Shortly after the inspection, Respondent took immediate corrective action by installing the appropriate placard. Accordingly, having reviewed the record and considered the assessment criteria, a civil penalty will not be assessed for this violation in lieu of Respondent's prompt corrective action.

Summary and Payment Directions

Accordingly, having reviewed the record and considered the assessment criteria, I assessed Respondent a total civil penalty of \$400,000. A determination has been made that Respondent has the ability to pay this penalty without adversely affecting its ability to continue business.

Payment of the civil penalty must be made within 20 days of service. Federal regulations (49 C.F.R. § 89.21(b)(3)) require this **payment be made by wire transfer**, through the Federal Reserve Communications System (Fedwire), to the account of the U.S. Treasury. **Detailed instructions are contained in the enclosure.** After completing the wire transfer, send a copy of the **electronic funds transfer receipt** to the **Office of the Chief Counsel (DCC-1)**, Research and Special Programs Administration, Room 8407, U.S. Department of Transportation, 400 Seventh Street, SW, Washington, DC 20590-0001.

Questions concerning wire transfers should be directed to: Financial Operations Division (AMZ-120), Federal Aviation Administration, Mike Monroney Aeronautical Center, P.O. Box 25770, Oklahoma City, OK 73125; (405) 954-4719

Failure to pay the \$400,000 civil penalty will result in accrual of interest at the current annual rate in accordance with 31 U.S.C. § 3717, 31 C.F.R. § 901.9 and 49 C.F.R. § 89.23. Pursuant to those same authorities, a late penalty charge of six percent (6%) per annum will be charged if payment is not made within 110 days of service. Furthermore, failure to pay the civil penalty may result in referral of the matter to the Attorney General for appropriate action in an United States District Court.

COMPLIANCE ORDER

Under 49 U.S.C. § 60118(a), each person who engages in the transportation of [gas] hazardous liquids or who owns or operates a pipeline facility is required to comply with the applicable safety standards established under chapter 601. The Notice proposed a compliance order. At the hearing, Respondent requested the clarification of some terminology contained in the proposed compliance order.

First, compliance term, "safety sensitive area" is an area that extends 220 yards from a public paved road, a public gathering area, or any building intended for human occupancy. Second, "associated transmission piping and equipment" refers to those lines used solely for the purpose of transporting gas in and out of storage. Third, "low spot" refers to an area where appreciable fluids are known to collect, based on history, operator knowledge, piping configuration and topography. Respondent also requested clarification of some of the requirements of the order. Those have been included.

Pursuant to the authority of 49 U.S.C. § 60118(b) and 49 C.F.R. § 190.217, Respondent is hereby ordered to take the following actions to ensure compliance with the pipeline safety regulations applicable to Respondent's operations.

Part A: Internal Corrosion Control Program

1. Policies and Procedures

Develop a set of integrated internal corrosion policies and procedures that comply with the Federal regulations and Industry standards. These policies and procedures should be detailed, and include guidelines and numerical thresholds to prompt remedial attention and subsequent action. These procedures shall be completed and submitted to the Eastern Region Office of Pipeline Safety by six months after the date of the final order.

2. Evaluation.

Evaluate the current status of all active storage fields and associated mainline transmission piping and equipment with regard to internal corrosion. Evaluation should include, but not necessarily limited to:

- a) leak history data
- b) pipe inspection reports
- c) pigging history data
- d) fluid/gas sample analysis data
- e) corrosion coupon data
- f) operating pressure
- g) general pipe specifications (i e , Pre-1970 ERW, Lapweld)
- h) the identification of safety sensitive areas

Use a two-tier system to categorize the storage fields and associated transmission lines. Tier I facilities are those facilities where remedial action will include monitoring for corrosion data and an integrity assessment of various lines using techniques such as smart pigging, wirelining, ultrasonic inspection, and bellhole verification. Tier II facilities are those facilities where remedial action will consist of monitoring for corrosion data, with that data driving subsequent action as appropriate. These fields are identified in Attachment A and the lines in Attachment B.

Fields and associated piping identified during this evaluation as having a history of internal corrosion or that are suspect of having internal corrosion, should be prioritized for further evaluation and remediation, with prioritized emphasis placed on those facilities located in safety sensitive areas.

3. Specific Plans and Schedules.

Develop site specific plans to address internal corrosion at all active storage fields throughout the Columbia Gas system (including associated mainline transmission piping and station equipment). In addition to the general guidelines in Item #2 above, priority should be given to the Ripley, Rockport, Gladys, and Terra Alta storage fields, due to the recent internal corrosion issues that have been identified at these locations. Complete and submit site specific plans for the Ripley, Rockport, Gladys and Terra Alta fields, and all remaining Tier I storage fields to OPS for review by six months after the date of the final order. Complete and submit to OPS for review, site specific plans for all Tier I associated transmission lines by 12 months after the date of the final order.

Site specific plans for all remaining active storage fields and associated transmission lines must be submitted by 18 months after the date of the final order. This schedule applies to the lines and fields as they are currently categorized.

4. Plan Details.

Site specific plans for addressing internal corrosion at active storage fields and associated mainline transmission piping and station equipment, as required in Item #3 above must, at a minimum, address the following:

- a) Identification of points where fluids may accumulate in the field, that shall include, but not limited to: drips, low areas, separators and filters.
- b) Identification of all fluid sample locations and the placement of corrosion monitoring coupons and/or other devices used for monitoring internal corrosion. Proper placement of corrosion monitoring coupons and fluid sample collection locations are critical for the proper evaluation of internal corrosion.
- c) Identification of all lines capable of internal inspection within the storage field (including mainlines and well lines). This section should also include a pigging schedule, outlining the intervals at which these line should be pigged to remove fluids.
- d) Instructions for the collection of fluid/gas samples and the intervals and locations at which the samples will be collected. This section should identify action steps to be taken based on specific levels of contaminants found in the fluid/gas samples. (Liquid contaminants: chlorides, bacteria and gas contaminants: (CO₂, O₂, H₂S)
- e) Instructions and intervals for evaluating corrosion monitoring coupons. This section should identify action steps to be taken based upon coupon metal loss rate.
- f) Type of internal corrosion remediation treatment/systems that are being used at the specified field, such as Batch, direct injection, de-aeration systems, oxygen scavenging chemicals (alkaline sulfites), etc
- g) Identify the type(s) of corrosion biocides and/or inhibitors that are being used, or will be applied, to control and prevent internal corrosion. It is very important to understand the corrosion problem and its cause before selecting a corrosion inhibitor. Laboratory tests, field tests, industry experience and the inhibitor manufacturer's recommendations can be useful for screening inhibitors as to their effectiveness and required injection rates.
- h) Identification of the location at each station where a representative fluid sample will be taken to monitor station equipment.
- i) Identification of immediate remedial action steps to be undertaken at each Tier I location.

5. **Quality Assurance Program.**

Establish a quality assurance program to periodically review and evaluate the site specific corrosion control plans, that are required in Item #3 above, to ensure that the programs and treatments being used are effective.

The Quality Assurance Program should, at a minimum, include the following:

- a) The selection of previously inspected lines or line segments within each storage field that are to be used for selective future monitoring of the program and treatments implemented.
- b) Internal inspection of the selected lines every 3 years (for a period of 9 years) utilizing the same or similar type of internal inspection tool used during the initial inspection. Provide for verification digs to substantiate the data obtained from the internal inspection devices. Include a comparison of data from internal inspections to verify the effectiveness of the treatment programs implemented

If after the initial inspection and the first 3-year cycle, Respondent desires to inspect the selected lines utilizing a tool or method other than wirelining/smart pigging, obtain approval from the Regional Director, OPS Eastern Region by providing advance notice and an explanation for the request.

- c) A review of internal corrosion coupons, leak reports, fluid and gas sample analysis reports, visual examination of internal surfaces of facilities when exposed, and other data collected that could be used to evaluate the effectiveness of the program.

Provide quarterly updates to OPS on the status of the internal corrosion programs at each field. These quarterly updates must include, but are not limited to, all internal corrosion related leaks reported for the quarter, line replacements, repairs, pigging, results of internal pipe examinations, fluid/gas sample results, corrosion coupon monitoring results; as well as plans and progress accomplished Submit Quarterly reports no later than 30 days following the end of each calendar quarter.

6. **Third Party Review.**

Provide for the procedures and site specific plans to be reviewed by a third party consultant. This consultant must be acknowledged by OPS as a qualified specialist in the evaluation and treatment of internal corrosion. Include a copy of this review in documentation provided to OPS.

7. Project Execution.

Undertake the designed program in an orchestrated, expeditious manner, such that information about activities, progress and findings from all affected locations are communicated to all members of the project team. Such information should routinely be used to adjust and refine the further implementation of the program; as well as prompt re-consideration for work already performed.

8. Project Update Reports.

Base each information submission to OPS on report sections, identify new or replacement sections and previously provided engineering data or recommendations. The cover letters associated with updates shall direct the reader to discard particular document sections in lieu of the currently attached. A 3-ring binder technique is suggested, where the content sections are replaced with updated sections. Each update should include four copies.

In lieu of the reporting method described above, Respondent may submit information to OPS in an electronic format

9. Confidential Business or Security Information.

Confidential, privileged or trade secret or security information will be processed in accordance with the Freedom of Information Act (FOIA). Should Respondent consider any data or materials submitted to OPS under this order to be confidential or privileged, Respondent will clearly identify them as such.

10. Modification to Order

The Director, Eastern Region, OPS may grant an extension of time for completion of any of the actions required herein, or agree to a modification of a plan originally approved, upon receipt of a written request from Respondent stating the reasons for the request.

11. Order Cessation.

Four (4) years following the issuance of this final order, the Regional Director will conduct a review to determine the status of compliance with the Order and the degree of completion of required activities under the Order. At that time, the Director, Eastern Region, OPS may recommend that parts or all of the Order be closed, as appropriate. If the Order remains open in whole or in part, reviews will continue to be conducted annually until the Order is closed in its entirety.

Part B: Pressure Up-rating for Line 18045 near Ellamore, WV

1. Line 18045, at Ellamore, WV.

By 2 months after the date of the final order, either reduce the currently listed MAOP of Line 18045 at Ellamore, West Virginia to 473 psig, or successfully up-rate Line 18045 to a new MAOP, according to the requirements of Title 49 C.F.R. Part 192.

2. Procedural Analysis.

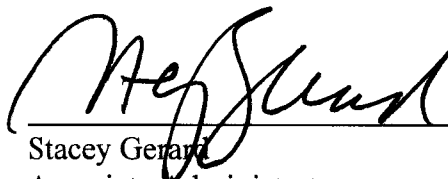
By 2 months after the date of the final order, review all company procedures, field practices and any other written or informal directives, to assure that the future application of the pressure up-rating process adheres to the requirements of Title 49 C.F.R. Part 192.

All information requested above should be mailed to OPS, Eastern Region, at the following address:

Mr William H Gute, Director Eastern Region
Office of Pipeline Safety
400 7th Street, SW, Room 7130, DPS-24
Washington, DC 20590

Under 49 C.F.R. § 190.215, Respondent has a right to petition for reconsideration of this Final Order. The petition must be received within 20 days of Respondent's receipt of this Final Order and must contain a brief statement of the issue(s). The filing of the petition automatically stays the payment of any civil penalty assessed. All other terms of the order, including any required corrective action, shall remain in full effect unless the Associate Administrator, upon request, grants a stay. The terms and conditions of this Final Order are effective upon receipt.

Failure to comply with this Final Order may result in the assessment of civil penalties of up to \$25,000 per violation per day, or in the referral of the case for judicial enforcement.


Stacey Gerant
Associate Administrator
for Pipeline Safety

MAR 29 2002

Date Issued

CATEGORIZATION OF LINES ASSOCIATED WITH STORAGE FIELDS

Associated Lines	Storage Field	Tier I	Tier II
WB-6	Glady	X	
X-59-MI	Ripley	X	
X-58-MI	Rockport	X	
WB-3	Terra Alta & Terra Alta S.	X	
10163	Artemas A & B		X
R-515	Benton		X
X-52-MI	Coco A, B, C		X
R-453	Crawford		X
R	Dundee		X
O-1450	Guernsey		X
SM-85	Hunt		X
R-595	McArthur		X

ATTACHMENT A

CATEGORIZATION OF INTERNAL CORROSION STORAGE FIELDS

Storage Field	Tier
Artemas A	1
Artemas B	1
Coco B	1
Dundee	1
Glady	1
Ripley	1
Rockport	1
Terra Alta	1
Terra Alta South	1
Victory A	1
Victory B	1
Benton	2
Brinker	2
Coco A	2
Coco C	2
Crawford	2
Donegal	2
Greenwood	2
Greenwood North	2
Guernsey	2
Holmes	2
Hunt	2
Lanham	2
Laurel	2
Lorain	2
Lucas	2
McArthur	2
Medina	2
Pavonia	2
Wayne	2
Weaver	2
Wellington	2

ATTACHMENT B